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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,992	05/19/2008	Horst Greiner	DE 030229	1252

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CORPORATE PATENT COUNSEL
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EXAMINER

DZIERZYNSKI, EVAN P

ART UNIT	PAPER NUMBER
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2875

MAIL DATE	DELIVERY MODE
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01/19/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/561,992	GREINER, HORST	
	Examiner	Art Unit	
	EVAN DZIERZYNSKI	2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2 and 4-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2 and 4-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 February 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 4-7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pelka WO 01/07828 in view of Schellhorn et al. US PAT 4907044.

As for claim 4, Pelka discloses a housing 140 having a bottom surface (Fig 1) inner walls (walls of 140) and a light emission surface (through 170); and a plurality of light sources 174 arranged in the housing (Fig 2) and configured to radiate light in a direction substantially parallel to the light emission surface (p. 3, ln 25+, laterally); wherein inner walls reflect the light at least partly (p. 4, ln 1-5); wherein each light source comprises an LED element 174 and a lens body (110, 120, Fig 9-11) provided thereon to emit the light substantially in a direction perpendicular to an axis of the LED element (p. 3, ln 25, laterally, via 110, 120). Pelka further discloses the LED elements (174, 430) inserted into a bottom surface such that a body 430 extends through a cover plate (150, Figs 9-11), but fails to specifically teach or disclose both the LED and the lens body extending through the cover plate. Schellhorn teaches an LED light source C having a lens E that extends through a bottom surface of a cover plate (R, Fig 2). It would have been obvious for one of ordinary skill in the art to substitute the LED and

Art Unit: 2875

lens of Schellhorn that extends through a cover plate, in for the LEDs of Pelka, to provide an improved LED configuration with a lens and surrounding reflector that results in a maximum size solid angle (Schellhorn, col 2, ln 62+). One would have been motivated to make this combination where it is desired to provide LEDs and related optics that avoid creating hot spots (col 2, ln 66+) and that can achieve a maximum size solid angle.

As for claim 2, Pelka discloses that the light sources are laterally emitting LEDs (shows lateral emission in Figs 9-11 and teaches lateral emission on p. 3, ln 25+).

As for claim 5, Pelka discloses surfaces of the lens bodies facing the light emission surface being reflective (410, Figs 9-11), but fails to teach using a reflective coating. It would have been an obvious to one having ordinary skill in the art at the time the invention was made to use a reflective coating since the examiner takes Official Notice of the equivalence of reflective coatings and other reflective structures for their use in the illumination art and the selection of any of these known equivalents to reflect light would be within the level of ordinary skill in the art. *KSR International Co. v. Teleflex Inc.*, 550 U.S. -, 82 USPQ2d 1385 (2007).

As for claim 6, Pelka discloses an intermediate layer extending over the lens bodies (TIR region 400) and having a surface in the regions of the surfaces of the lens bodies facing the light emission surface (Fig 8), which reflects light issuing from the bodies at least substantially (p. 6, ln 22+). Pelka fails to teach using a reflective coating. It would have been an obvious to one having ordinary skill in the art at the time the invention was made to use a reflective coating since the examiner takes Official Notice

Art Unit: 2875

of the equivalence of reflective coatings and other reflective structures for their use in the illumination art and the selection of any of these known equivalents to reflect light would be within the level of ordinary skill in the art. *KSR International Co. v. Teleflex Inc.*, 550 U.S. -, 82 USPQ2d 1385 (2007).

As for claim 7, Pelka discloses that the light emission surface is formed by a partly transparent, diffusely scattering diffuser plate (180, Fig 2, p. 5, ln 1+).

As for claim 10, Pelka discloses that the light emission surface is covered with an optical foil 190 which allows light to pass through substantially only within certain angular regions (p. 4, ln 27+).

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pelka, Schellhorn, and further in view of Lang US PAT 4714983.

As for claim 8, Pelka discloses the device as discussed above, but fails to teach or disclose that the transmittance of the diffuser plate is reduced in regions which lie opposite to the lens bodies. Lang teaches members for reducing the transmission of light 20 that correspond to the location of light sources (36, Fig 2). It would have been obvious for one of ordinary skill in the art to combine the light blocking means of Lang with the diffuser of Pelka, to provide a diffuser with portions having reduced transmission, where it is desired to reduce the transmission of light in portions of the lighting device of Pelka. One would have been motivated to make this combination to produce a particular illumination pattern, or to reduce brightness spots in the device of Pelka.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pelka, Schellhorn, and further in view of Burrows US PAT 4181925.

As for claim 9, Pelka discloses the device as discussed above, but fails to teach or disclose that the diffuser plate comprises a phosphor material that converts the color of the light passing through. Burrows teaches a plate with a phosphor material that can convert the color of light passing through (col 3, ln 13+). It would have been obvious for one of ordinary skill in the art to use the diffuser plate having phosphors of Burrows in the device of Pelka to provide a diffuser that can convert light to a desired color. One would have been motivated to make this combination where it is desired to produce colored light.

Response to Arguments

Applicant's arguments with respect to claim 1 have been fully considered. A new rejection with a more clearly stated motivation statement using Schellhorn US PAT 4907044, which teaches an LED light source C having a lens E that extends through a bottom surface of a cover plate has been combined with for the limitations Pelka lacks. See the discussion above for the motivation for combining with Schellhorn. Since the rejection has been changed, this action is **non-final**.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EVAN DZIERZYNSKI whose telephone number is (571)272-2336. The examiner can normally be reached on Monday through Friday 8:00 am -4:30pm.

Art Unit: 2875

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandy O'Shea can be reached on M-F (571)-272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Evan Dzierzynski/
Examiner, Art Unit 2875